

REMARKS/ARGUMENTS

Claims 1-4, 6-12, and 14-19 are pending.

Claims 1-2, 11, and 17-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/63764 to Malmivirta et al. in view of WO 00/51380 to Rimpela et al. and further in view of U.S. Patent No. 7,024,216 to Vukovic et al. Claims 3-4, 6-8, 12, and 14 were rejected as unpatentable over Malmivirta in view of Rimpela and Vukovic, and further in view of U.S. Patent No. 6,272,337 to Mount et al. Claims 9-10 and 15-16 were rejected as being unpatentable over Malmivirta in view of Rimpela and Vukovic, and further in view of U.S. Patent Application Publication 2003/0028643 to Nelson, Jr. et al.

Response to Rejections Under 35 U.S.C. 103(a)

Claim 1 is directed to a method of testing a mobile terminal. The method includes steps of (1) transmitting a predetermined data pattern from a test apparatus to the mobile telephone terminal on a downlink, (2) the terminal receiving the predetermined data pattern and responding by transmitting an access request on an uplink to the test apparatus, and (3) the test apparatus receiving the access request and analyzing the access request to assess the performance of the terminal based upon assessment of the access request alone. Claim 1 further requires that the test apparatus transmits the predetermined data pattern multiple times at different power levels, and the test apparatus analyzes each access request to determine a power level threshold at which the terminal fails to transmit an access request. The method of Claim 1 thus is simple in that the test apparatus analyzes the access request alone to assess the performance of the terminal, and does not need to engage in an exchange of messages in response to the access request in order to analyze the performance of the terminal. The method of Claim 1 requires only that the terminal issue an access request, and the test apparatus analyze the access request. Further exchanges between the test apparatus and terminal are unnecessary.

Independent Claims 11 and 17 each is directed to a test apparatus comprising components that perform steps of transmitting a predetermined data pattern to the mobile terminal on a

downlink, and receiving an access request from the terminal and analyzing the access request to assess the performance of the terminal based upon assessment of the access request alone. The test apparatus is adapted to vary the power level at which the predetermined data pattern is transmitted and to analyze each access request from the terminal to determine a power level threshold at which the terminal fails to transmit an access request.

Independent Claim 18 is directed to a test method sharing many of the same steps as Claim 1. Claim 18 differs from Claim 1 in that Claim 18 recites that the test apparatus assesses the performance of the terminal based upon assessment of the access request and without replying to the terminal in response to the access request.

Claims 1-2, 11, and 17-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Malmivirta in view of Rimpela and further in view of Vukovic. As Applicant has previously pointed out, the combination of Malmivirta and Rimpela does not teach the feature of analyzing the access request to assess the performance of the terminal based upon assessment of the access request *alone*. The Office Action cites page 14 lines 11 to 26 of Rimpela as teaching a test apparatus receiving an access request and analyzing the access request to assess the performance of the terminal based upon an assessment of the access request alone. This is simply not the case. The first paragraph on page 14 of Rimpela explains that testing of downlink communications is performed by first setting up an arrangement in which the mobile station to be tested is coupled to a testing apparatus and turned on such that the mobile station performs a login. This login can be regarded as being an access request. Following login, the testing apparatus transmits a downlink data packet to the mobile station. *The testing apparatus starts downlink data transmission and testing by sending a special test message 505 in the RLC data block. The test message includes information on what kind of uplink data transmission should be started by the mobile station* (page 14 lines 20-24).

Rimpela goes on to describe that the mobile station then processes the special test message 505 and after a predetermined delay it starts transmitting an uplink data packet (PDU)

to the test apparatus. This arrangement is used to test RLC/MAC functions, MAC states, timings, and connection setups (page 14 line 28 to page 15 line 17).

It is thus clear that in Rimpela the mobile station must provide uplink data in order for its performance to be assessed, and thus the assessment of its performance is not based on analyzing an access request *alone* as required by each of Claims 1, 11, and 17. Furthermore, Rimpela's test apparatus responds to the access request by transmitting the downlink data packet to the mobile terminal, in contrast to Claim 18 which requires that the test apparatus assess the performance of the terminal based upon assessment of the access request and *without replying to the terminal in response to the access request*.

Therefore, even if Malmivirta and Rimpela were to be combined in some way, the result would still fail to include the novel aspects of the invention of each of independent Claims 1, 11, 17, and 18. Vukovic also fails to teach these novel aspects.

Moreover, the Office Action asserts that Vukovic teaches the test apparatus transmitting a predetermined data pattern multiple times at different power levels, the test apparatus analyzing each access request to determine a power level threshold at which the terminal fails to transmit an access request. The Office Action asserts that it would have been obvious to combine the teachings of Malmivirta and Rimpela with those of Vukovic to arrive at the inventions of Claims 1, 11, 17, and 18. Applicant respectfully disagrees.

The first point to recognize about Vukovic is that it does not relate to a method of testing a mobile telephone terminal, but rather relates to a method of allocating a communication resource in a broadband communication system. Thus, the Vukovic reference is in a different technical field from that of the present invention.

Furthermore, in the system disclosed in the Vukovic reference, a *mobile station* transmits a signal at varying power levels, the signal being an access request or preamble serving the dual purpose of an access request and for power control, as is disclosed at column 1 lines 65 to 67 of Vukovic. Subsequently, the basestation responds by sending either an acknowledgement

("ACK") of the preamble or a "NAK" indicating that no communication channel is currently available. The ACK or NAK is transmitted only when the signal from the mobile station is of sufficient power to be received correctly. If the mobile station receives an ACK, the mobile station responds by sending messages on the communication channel.

Thus, in Vukovic the message transmitted at varying power levels is not the predetermined data pattern required by Claims 1, 11, 17, and 18, but is a power control or access request. Moreover, the message is transmitted by the *mobile station*, rather than by a test apparatus as required by Claims 1, 11, 17, and 18. These teachings of Vukovic fall far short of teaching or suggesting a *test apparatus* transmitting a predetermined data pattern multiple times at different power levels, and the test apparatus then analyzing each access request to determine a power level threshold at which the terminal fails to transmit an access request.

In view of this, Applicant submits that it would not have been obvious to combine the teachings of Malmivirta and Rimpela with the teaching Vukovic, which is in a different technical field, but even if these references were to be combined, the result would not include all of the limitations of Claims 1, 11, 17, and 18.

In summary, Applicant respectfully submits that the novel aspect of analyzing an access request *alone* to determine the performance of a mobile terminal produces significant benefits in terms of simplification and reduced cost, and is not suggested by conventional test arrangements as disclosed by the cited references. The claims of the present application therefore define both novel and nonobvious subject matter.

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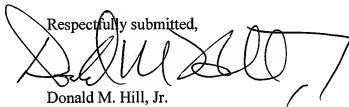
Appl. No.: 10/506,370
Amdt. Dated January 4, 2010
Reply to Office Action of August 5, 2009

Conclusion

Based on the above remarks, it is submitted the application is in condition for allowance.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefor (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Donald M. Hill, Jr.', is written over the typed name.

Donald M. Hill, Jr.
Registration No. 40,646

Customer No. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111

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